

NOTES UPON THE PLUMAGE OF THE ADULT MALES
IN CERTAIN SPECIES OF THE GENUS *MALURUS*.

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The late Mr. Gould speaking of the genus *Malurus* in his 'Handbook to the Birds of Australia,' says—"The members of this genus are among the most beautiful of our Australian birds. Their gay attire, however, is only assumed during the pairing-season, and is retained for a very short period, after which the sexes are alike in colouring." Further on speaking of *Malurus cyaneus*, "During the months of winter it associates in small troops of from six to eight in number (probably the brood of a single pair), which continually traverse the district in which they were bred. At this period of the year the adult males throw off their fine livery, and the plumage of the sexes becomes so near alike that a minute examination is requisite to distinguish them."* Relative to the above statements that the males of the genus *Malurus* only assume their full plumage during the pairing season, and that the adult males throw off their fine livery in winter and can hardly be distinguished from the females, Gould is decidedly in error.

During the last three or four years I have paid particular attention to the subject, and find that as regards *Malurus cyaneus* the results of my observations are that after the male has once assumed its fully adult plumage, it always retains that phase, and that the fully adult male is as brilliant in its colouring during the winter months as it is in spring and summer. The winter just past is well known to have been one of the coldest we have experienced for several years, yet on reference to my note-book I find that from the 25th of May until the middle of August I have frequently observed the fully plumaged males of *M. cyaneus* in the public

* Gould, Handbk. Bds. Austr., Vol. I., pp. 317-8.

parks and gardens about Sydney. At Dobroyde I have also noted them during May, June, July and August. On the 2nd of August I met with a pair of *M. cyaneus* in Dobroyde garden; they were very tame and allowed me to approach within a few feet of them; the male was a most brilliantly plumaged bird, and fully excelled, if not exceeded, any I have seen during spring and summer; Mr. James Ramsay who was present at the time informed me that the pair in question were bred in the garden about the end of 1889 and had remained ever since, and that at the end of March when they were about three months old, and before the male had commenced to assume his distinguishing plumage, they constructed a nest in the bushy end of a drooping branch of a pine tree (*Araucaria cunninghami*) growing in the garden; this was unfortunately discovered by a Narrow-billed Bronze Cuckoo (*Lamprococcyx basalis*) which deposited an egg in it, which was hatched by the *Malurus* upon whom devolved the rearing of the intruder and sole occupant of the nest.* I saw the young male *Malurus* referred to on the 21st of June; it had then just attained its fully adult plumage.

The young males of *M. cyaneus* are similar to the females until they are between three and four months old, when they commence to develop their distinguishing plumage, and assume their full adult livery at the end of six months.

About Dobroyde this winter I have met with *M. cyaneus*, in pairs; this is exceptional, as in the Botanic Gardens and elsewhere I have mostly observed them in small companies from five to seven in number, flitting from bush to bush, or tripping about on the grass. Some of these companies exhibit the different stages of plumage assumed by the male of this species, viz., juvenile, semi-adult, and fully adult; others exhibit only the dull coloured plumage of the female, the latter probably the last brood of the season, for these birds breed till late in the autumn. One may, however, see probably four or five birds in the brown plumage of the female, or the mixed brown, blue and black, of the semi-adult,

* This pair again started to build on the 16th of August on the site of their old nest in the pine tree.

to one of the fully adult males in their rich velvety blue and black attire. Gould may have been misled by seeing young males in their semi-adult stage of plumage during winter, though in no instance does he make any reference to this interesting phase of plumage of the young males of *M. cyaneus* in their progress towards maturity.

Hitherto I have confined my remarks to *M. cyaneus*, which any member can verify for himself by watching carefully for these birds in any of the public parks or gardens about Sydney, a favourite resort of this species being the ornamental shrub covered beds and grassy lawns of the lower portion of the Botanic Gardens, and the fully adult male may occasionally be met with during winter in the grounds surrounding this very Hall of the Linnean Society.*

In illustration of my paper I exhibit to night a series of *M. cyaneus*, *M. lamberti*, *M. cruentatus*, *M. elegans*, and *M. leucopterus* in the various stages of plumage referred to, also adult males procured during the depth of winter for comparison with others obtained during spring and summer.

In the Red-backed section of the *Malurus*, young males bred early in the season change the colour of their feathers, from brown to black and red, and retain the full colour of the adult after their first moult. Dr. Ramsay informs me he has also observed the change in the colour of the feathers of the young males in *Ptilorhis paradiseus*, and *Sericulus melinus* in their progress towards maturity.

On the 16th of July, Mr. George Barnard of Duaringa, Queensland writes as follows:—"In reply to your letter respecting the winter livery of the *Malurus*, found in this neighbourhood, as far as our experience goes there are always some males to be seen in full plumage during winter, but generally very scarce, whether

* Mr. Fletcher informs me that, as both Mr. Froggatt and himself have observed, it has been almost a daily occurrence all through the winter months to have one's attention called to the antics of a full-plumaged male perched on a branch close to one of the windows vigorously pecking at his own reflection in the glass.

hiding or not when in full plumage I cannot say, but with *M. melanocephalus* you may disturb eight or more apparently females, and after a little while you may see a full plumaged male dodging through the grass seemingly to escape observation. I have often noticed some of the birds with a little red on their backs ; these I always considered to be young males, but may they not have been old males with only partial plumage ? but I hardly think so, as I well remember when I lived in Tasmania I used to shoot *M. gouldi* for skins always in winter, and here *M. lamberti* is always in full plumage, so that I think points to the fact the male Warblers always retain their adult plumage."

Mr. George Masters, the Curator of the Macleayan Museum at the University, informs me that when he was in Tasmania he also observed the male of *M. gouldi* in full adult plumage during winter.

Mr. K. H. Bennett of Yandembah, New South Wales, writes as follows :—"In answer to your query *re Maluri*, I certainly think that Gould is in error, or if the change in plumage does occur, it is by no means constant, for males of the several species found in this locality are to be met with in full livery at all times, and so far as my experience goes are as plentiful in winter as at any other season, but I have frequently met with families or companies of more than a dozen individuals in the sombre dress of the female ; these could not have been a single brood as there were far too many. The species found here is *M. leucopterus*, but some sixty miles to the north of this place *M. melanotus*, *M. splendens*, and *M. leuconotus* are also to be met with ; the two latter, however, are so rare that I cannot speak with certainty as to the retention of the full plumage of the males, but I am certain that full plumaged males of *M. leucopterus* and *M. melanotus* are to be met with at all times of the year."

Mr. James Ramsay, of Dobroyde, paid particular attention to the various phases of plumage assumed by the males in the genus *Malurus*, during several years residence on Tyndarie Station, in the interior of New South Wales, and as regards the species found there, viz., *M. lamberti*, *M. leucopterus*, *M. leuconotus*, and *M.*

callainus, he assures me that the male having once assumed the adult phase of plumage, always retains it the whole year round.

Dr. Ramsay is of opinion that in the section of the genus *Malurus* in which the blue predominates, the males having once attained their full adult plumage always retain it, but does not feel quite so certain about the members of the red-backed section.

From the experience of the authorities quoted above, and my own as regards that of *M. cyaneus*, together with a careful examination of a large series of each known species of the genus, I have not the slightest doubt that the males of all species of the genus *Malurus* will be found to retain their full adult and distinguishing phase of plumage after once they have assumed it.